

## SEQUENCE LISTING

<110> TAKARA BIO INC.

<120> Method for introducing mutation into target nucleic acid

<130> 663910

<150> JP 2002-204887

<151> 2002-07-12

<150> JP 2003-113534

<151> 2003-04-18

<160> 16

<170> PatentIn Ver. 2.1

<210> 1

<211> 720

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Gene encoding red-shifted  
green fluorescence protein.

<400> 1

atggctagca aaggagaaga actcttcact ggagttgtcc caattcttgt tgaattagat 60

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ggtgatgtta acggccacaa gttctctgtc agtggagagg gtgaaggtga tgcaacatac 120
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ctagtcacta ctctgtgcta tgggtgttcaa tgcttttcaa gatacccgga tcatatgaaa 240
cggcattgact ttttcaagag tgccatgccc gaaggttatg tacaggaaaag gaccatcttc 300
ttcaaagatg acggcaacta caagacacgt gctgaagtca agtttgaagg tgataccctt 360
gttaatagaa tcgagttaaa aggtattgac ttcaaggaag atggaaacat tctgggacac 420
aaattggaat acaactataa ctcacacaat gtatacatca tggcagacaa aaaaaagaat 480
ggaatcaaag tgaacttcaa gacccgccac aacattgaag atggaagcgt tcaactagca 540
gaccattatc aacaaaatac tccaattggc gatggccctg tccttttacc agacaacat 600
tacctgtcca cacaatctgc cttttcgaaa gatcccaacg aaaagagaga ccacatggtc 660
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<210> 2

<211> 40

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: PCR primer Us-EcoRI to  
amplify a gene encoding red-shifted green fluorescence  
protein.

<400> 2

cttgaattcg gtaccgagct cggatcgggc gcgcaagaaa

40

<210> 3

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: PCR primer DEND to amplify  
a gene encoding red-shifted green fluorescence protein.

<400> 3

cactggcggc cgttactagt

20

<210> 4

<211> 40

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: PCR primer Us-HindIII  
to amplify a gene encoding red-shifted green fluorescence  
protein.

<400> 4

cttaagcttg gtaccgagct cggatcgggc gcgcaagaaa

40

<210> 5

<211> 40

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: PCR primer U100HindIII  
to amplify a portion of gene encoding red-shifted green  
fluorescence protein.

<400> 5

ctaagcttct ggcaaactgc ctgttccatg gccaacacta

40

<210> 6

<211> 40

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: PCR primer D100BamHI to  
amplify a portion of gene encoding red-shifted green  
fluorescence protein.

<400> 6

tcggatccaa gtcatgccgt ttcatatgat ccgggtatct

40

<210> 7

<211> 37

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: PCR primer Us-EcoRI-1  
to amplify a gene encoding red-shifted green fluorescence  
protein.

<400> 7

gaattcggta ccgagctcgg atcggg'gcgcg caagaaa

37

<210> 8

<211> 37

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: PCR primer Us-HindIII-1  
to amplify a gene encoding red-shifted green fluorescence  
protein.

<400> 8

aagcttggta ccgagctcgg atcggg'gcgcg caagaaa

37

<210> 9

<211> 38

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: PCR primer U100HindIII-1  
to amplify a portion of gene encoding red-shifted green  
fluorescence protein.

<400> 9

aagcttcttg caaactgcct gttccatggc caacacta

38

<210> 10

<211> 54

<212> DNA

<213> Artificial Sequence

<220>

<221> modified\_base

<222> (1).. (4)

<223> um

<220> <221> modified\_base

<222> (50).. (53)

<223> um

<220>

<223> Description of Artificial Sequence: Chimeric oligonucleotide  
ss Oligo.

<400> 10

uuuuatcttg aaaagcattg aacaccatag cacagagtag tgactagtgu uuut

54

<210> 11

<211> 35

<212> DNA

<213> Artificial Sequence

<223> Description of Artificial Sequence: PCR primer RNA-*ecoRI*  
to amplify a portion of gene encoding red-shifted green  
fluorescence protein. "nucleotides 1 to 6 are 2'-O-methyl  
ribonucleotides - other nucleotides are deoxyribonucleotides"

<400> 11

gaauucggta ccgagctcgg atcggg'gcgcg caaga

35

<210> 12

<211> 35

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: PCR primer RNA-*hindIII*  
to amplify a portion of gene encoding red-shifted green  
fluorescence protein. "nucleotides 1 to 6 are 2'-O-methyl  
ribonucleotides - other nucleotides are deoxyribonucleotides"

<400> 12

aagcuuggta ccgagctcgg atcgggagag caaga

35

<210> 13

<211> 30

<212> DNA

<213> homo sapience

<400> 13

gattgcttta gcttggaat tccggagctg

30

<210> 14

<211> 40

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: PCR primer GFP-kB1 to  
amplify a portion of gene encoding red-shifted green  
fluorescence protein.

<400> 14

agctaaagca atctcagttg tacagttcat ccatgccatg

40

<210> 15

<211> 40

<212> DNA

<213> Artificial Sequence



<223> Description of Artificial Sequence: PCR primer GFP-kB2 to amplify a portion of gene encoding red-shifted green fluorescence protein.

<400> 15

tccggaattt ccaagctaaa gcaatctcag ttgtacagtt 40

<210> 16

<211> 40

<212> DNA

<213> Artificial Sequence

<223> Description of Artificial Sequence: PCR primer GFP-kB3 to amplify a portion of gene encoding red-shifted green fluorescence protein.

<400> 16

ttttggatcc cagctccgga atttccaagc taaagcaatc 40